Fellowships

Two engineering students have recently been awarded Battelle research fellowships in the graduate school of Ohio State University, according to an announcement by Clyde E. Williams, director of Battelle Memorial Institute. One is Jack Anthony Nachowitz, who received a Bachelor of Mechanical Engineering degree this year from the University of Illinois. The other is Sydney J. Brooks, who was graduated this year from the Ohio State University with the degree of Bachelor of Ceramic Engineering.

Under this fellowship plan, financed by Battelle as part of its contribution to research education, young technical graduates with previously high scholastic standing can pursue further university studies leading to advanced degrees, at the same time carrying on fundamental research at Battelle under the supervision of experienced research engineers. The accomplishments of these students at the Institute are used as a thesis in obtaining their advanced degrees.

Mr. Nachowitz's chosen research problem concerns the means of giving color to various metals and alloys. At the present time, paints and enamels are used on those metal objects which serve for decorative pieces; but by developing a process of coloring metals throughout the body, the finished surface of the metal could be made to permanently retain its attractiveness.

Through his research, which consists of very extensive reading about past experiments by other engineers, even though their discoveries were only incidental to their main objective, and then by extended laboratory trials with each of the various metals and alloys, Mr. Nachowitz hopes to build a theory which will generalize the process for many types of alloys.

As yet, no one has done any detailed work of this sort, but the successful completion of such a theory would open a wide, new field in metallurgy, and would eventually put many new and beautiful products into the hands of the consumer.

Mr. Brooks' problem is to investigate the effects of various vitrifying agents upon the physical properties of wall tile bodies. Feldspar and kaolin are the most commonly used agents in forming the glassy bond in hardened clay bodies of the wall tile type. But since various other agents produce different results upon the properties of such bodies, Mr. Brooks will conduct experiments with the individual substances, classifying the results, and then endeavor to formulate a more effective method of clay-body vitrification.